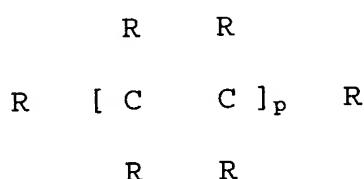


What is claimed:

1. A copolymer obtained by the copolymerisation of SiH-group-containing siloxanes with unsaturated compounds, wherein the copolymer comprises at least two SiH groups and that the SiH-group-containing siloxanes and the unsaturated compounds are linked to one another via C-Si bonds.

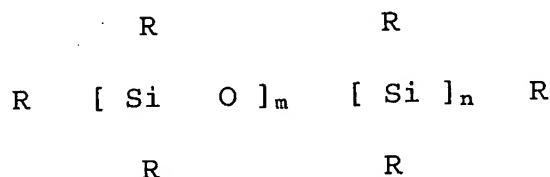
2. A copolymer according to claim 1 comprising repeating structural units

a) of the formula (I)



and

b) of the formula (II)



wherein m and p are each, independently, whole numbers > 0 , wherein n is 1, wherein each of the radicals R , independently, are selected from the group consisting of an H atom, an alkyl group, a group of the formula $=CR'_2$, $-CR'_2-OR'$, $-OR'$, $-COOR'$, $-SiR'_3$, a phenyl group optionally substituted by one or two

-CR'=CR'₂ groups, and a bond, wherein each of the radicals R', independently, is selected from the group consisting of an H atom, and a substituted or unsubstituted alkyl group, with the proviso that the groups of the formula II contain at least one Si-H group and that the groups of the formulae I and II are linked to one another via C-Si bonds.

3. A copolymer according to claim 2, wherein the alkyl groups are substituted alkyl groups.

4. A copolymer according to either claim 2, wherein the alkyl groups have 1, 2, 3, 4, 5, 6, 7 or 8 carbon atoms.

5. A copolymer according to claim 1, wherein the unsaturated compounds are acrylates, vinyl benzenes, vinyl ethers, allyl compounds, vinyl silanes or derivatives or mixtures thereof.

6. A copolymer according to claim 1, wherein the unsaturated compounds are monoacrylates, monovinyl benzenes, monovinyl ethers, monoallyl compounds, monovinyl silanes or derivatives or mixtures thereof.

7. A copolymer according to claim 1, wherein the unsaturated compounds contain at least one functional group or groups in addition to the double bond.

8. A copolymer according to claim 7, wherein the additional functional group or groups are selected from the group consisting of hydrogen silyl, alkoxy silyl, epoxy, aziridine, carbonic acid, carbonic acid anhydride groups, phosphate, or phosphonate groups.

9. A copolymer according to claim 1, wherein the ratio of SiH-group-containing siloxanes to vinyl-group-containing compounds is at least 1 : 25.

10. A copolymer according to claim 1, wherein the ratio of SiH-group-containing siloxanes to unsaturated compounds is at least 1 : 10.

11. A copolymer according to claim 1, wherein the ratio of SiH-group-containing siloxanes to unsaturated compounds is at least 1 : 5.

12. A copolymer according to claim 1, wherein thermal free radical formers are used as polymerisation catalysts in the reaction.

13. A copolymer according to claim 1, wherein photosensitive free radical formers are used as polymerisation catalysts in the reaction.

14. An adhesive comprising one or more copolymers obtained by the copolymerisation of SiH group-containing siloxanes with unsaturated compounds, wherein the copolymer comprises at least two SiH groups and wherein the SiH-group-containing siloxanes and the unsaturated compounds are linked to one another via C-Si bonds.

15. The adhesive of claim 14, additionally containing at least one readily volatile solvent.

16. A method of bonding dental prostheses, and silicone relinings for dental prostheses, comprising the following step:

contacting a dental prosthesis and a silicon relining to be bonded with an adhesive comprising one or more copolymers obtained by the copolymerisation of SiH group-containing siloxanes with unsaturated compounds, wherein the copolymer comprises at least two SiH groups and wherein the SiH-group-containing siloxanes and the unsaturated compounds are linked to one another via C-Si bonds.

17. The method of claim 16, wherein the silicone relinings are non-hardening silicone relinings.

18. The method of claim 16, wherein the silicon relining comprises addition-crosslinking vinyl silicones.

19. A method of bonding addition-crosslinking vinyl silicone impression compositions to impression trays comprising the following step:

contacting an addition-crosslinking vinyl silicone impression composition and an impression tray to be bonded with an adhesive comprising one or more copolymers obtained by the copolymerisation of SiH group-containing siloxanes with unsaturated compounds, wherein the copolymer comprises at least two SiH groups and wherein the SiH-group-containing siloxanes and the unsaturated compounds are linked to one another via C-Si bonds.